

March 13, 2014 Roundtable: Emergency Response Simulation Procedures / Considerations

MEETING PURPOSE

On March 13, 2014, the Pipeline and Hazardous Materials Safety Administration (PHMSA) held roundtable discussions with Department of Transportation (DOT) inspection and law enforcement entities and with emergency response representatives who had either expressed interest in participating in, or had previously consulted with PHMSA regarding, the Paperless Hazard Communications Pilot Program (HM-ACCESS). Inspectors, law enforcement staff, and emergency response personnel will have key roles in conducting the simulations and collecting data during the pilot program. The purpose of the discussions was to obtain feedback regarding their operations for coordinating emergency response pilot test simulations, as identified in the Federal Register Notices published on July 19, 2013 (78 Fed. Reg. 43263) and November 25, 2013 (78 Fed. Reg. 70399).

PHMSA initiated the meeting by providing a brief status update on the program, followed by an overview of the collection process and role of law enforcement and emergency responders under the pilot program. PHMSA provided the following important information regarding the data collection process and role of emergency response participants during the emergency response simulations:

- Simulations will be limited to testing electronic communication (e-communication) of shipping paper information. PHMSA will not be testing first responder procedures, equipment, or resources not related to the e-communication of shipping paper information.
- Simulations will be conducted following each agency's/company's/organization's established protocols using its own equipment and resources.
- One emergency response simulation questionnaire should be completed for each emergency response simulation conducted during the pilot test, preferably within 24 hours of conducting the actual simulation.
- Emergency responders will be requested to submit a copy of the electronic hazardous materials shipping paper receipt to PHMSA.

A roundtable discussion of existing operations and procedures for conducting the pilot emergency response simulations followed the overview. These discussions (comments and questions and answers) are summarized in this document.

GENERAL QUESTIONS AND COMMENTS

Comment: PHMSA should try to simulate as closely as possible real HM transportation scenarios along known HM transportation corridors with real-life emergency responders and carriers transferring and receiving HM shipping paper information electronically.

Comment: An evaluative process has to take place as responders begin a scene assessment. So if e-data can be transmitted in a faster, consistent format that provides responders with the identical information as is normally carried by the conductor or the engineer in hardcopy format and allows responders to mitigate that incident more rapidly, responders will be able to begin to build out their action plans. No action is going to be taken initially until responders determine what the actual HM is, as it is all a progression of informational exchange. So it is critical that we make sure we have the whole picture. The e-transfer of that data to the responders in whatever format will help to begin to mitigate that particular incident in a much more expeditious way.

Q: Who pays for emergency responders to attend the orientation meeting?

A: The requirement in the 30-Day Notice is for shippers and carriers to physically attend the meeting. If an emergency response/law enforcement organization cannot physically make it to the orientation meeting, PHMSA will make arrangements for the organization to participate remotely (via webinar or a teleconference), if PHMSA has selected the organization to participate in the pilot tests.

Comment: It will be very problematic to get law enforcement personnel to come at their own cost, so please plan to develop a webinar or some other methodology to get their participation. Also, the scope may be too narrow to get PHMSA the necessary information to fully grasp all of the various responder issues highlighted in the 30- and 60-Day Notices. I suggest PHMSA look at potentially expanding the scope; although only certain HM are being transported to certain areas of the country at certain times, there may be other ways of looking at doing simulations that can still get the same data analysis. **Response:** PHMSA is trying to make sure that 1) the pilot test satisfies all the requirements in MAP-21; 2) the October 2014 report deadline is met; and 3) we have information that has some good basis in reality, however small or niched or limited in time period. PHMSA is trying to figure out the best way to accomplish these tasks with its available resources, time constraints, and the pool of volunteers who have volunteered to participate in the pilot test.

Comment: I suggest PHMSA provide the response community with advance notice of the target date of your participant orientation meeting, so that responders can plan to participate. **Response:** PHMSA awaits approval of its data collection activities from the Office of Management and Budget (OMB). Once received, PHMSA will plan dates for the orientation meeting, pilot tests, etc. PHMSA will provide the dates to the response community as soon as possible for planning purposes.

Comment: The mandates that PHMSA has under MAP-21 and HM-ACCESS could perhaps be considered, with regard to the Congressional Report, as a progress report at

a particular point in time, and that these findings could and should change as technology improves.

Comment: At a recent meeting, participants commented that difficulties with Internet connectivity can be found in all areas (urban, suburban, and rural).

Comment: A system called FirstNet resulted from legislation in 2012, giving broadband spectrum for emergency responders and fire services, including HM information. Once FirstNet is launched in two to three years, paperless HM communications must be incorporated into it, because such communications are mission critical, and thus must be available 24/7 for law enforcement, fire, EMS, and other public users, depending on criticality and issues. **Response:** This information, including the FirstNet contact information, was shared with PHMSA at its R&D meeting. Once FirstNet is fully live, it will be the logical resource to start with, to make sure e-HM information and e-systems work with it.

Comment: Smaller agencies located in rural areas with frequent blackouts are always going to look and find ways to work around these situations, similar to what they have already done with inaccessible hardcopy shipping papers. It would be interesting to see if local 911 centers will be able to access the HM information electronically, and if there is some way that information could be printed and physically brought to responders in case we are in a blackout area responding to an HM incident. **Response:** In the online emergency response simulation questionnaire, we have questions relative to such situations. Also, PHMSA may add an appendix to the report identifying those areas in the country that are known to have some issues with wireless conductivity. The report will provide a disclaimer that this information is limited to the carriers participating, and the regions included, in the pilot test.

Q: Is it possible for PHMSA to make smaller scenario test packages (mock) so that the number and frequency of tests are not limited by the availability of actual HM transports, thereby essentially giving the scenario packages to shippers/carriers and having them work with responders to get the pilot data and then answer the questionnaires?

A: The Paperwork Reduction Act (PRA) required PHMSA to estimate the burden hours on the public. The HM-ACCESS team anticipated a maximum of 24 emergency response scenarios happening during the pilot test, which is lower than what we had estimated for the inspection scenarios, but we also based the estimations on the premise that inspections happen more frequently than emergency response events. We are hoping to be able to link carriers with emergency responders to develop scenario information at the orientation meeting.

Comment: I do not think we are going to get the data we need from conducting a maximum of 24 emergency response simulations. I think this is a pretty small scope in the sense of the amount of time that has already been spent on this project. We can probably maximize the time period by picking one single location and conducting simulations on a variety of HM. The variety of vehicle types will have varying different electronic or even paper bills of lading that will provide responders with a different set

of information. **Response:** PHMSA will verify with PHMSA's PRA POC that, as long as we do not exceed our total burden estimation calculation (described in the 30-Day Notice), we will be okay to increase the number of emergency response simulations by correspondingly decreasing other data collection efforts described in the 30-Day Notice.

Q: Can the BACK and NEXT buttons at the bottom of each question page in the on-line tool be moved to the top or side?

A: The HM-ACCESS team researched this feature, but could not find a way to move these buttons to a different location. Also, while the team will attempt to design the online tool to populate certain fields of the online questionnaires with agency/organization information already entered into previous questionnaires, such a feature may not be allowed by the software, and emergency responders and inspectors participating in the pilot tests may have to enter their agency/organization information each time they complete an online pilot test simulation questionnaire.

Comment: I would strongly encourage you to send the questionnaire out in advance of the pilot test, to allow responders an opportunity to look at it. **Response:** PHMSA has conducted some outreach internally with PHMSA field personnel and other stakeholders and asked them to review the questionnaires for additions, changes, etc. We have been trying to keep distribution internally to DOT staff only, to control additions and changes made to satisfy what personnel want to see rather than what really has to be in the questionnaire to address the MAP-21 requirements. PHMSA is trying to get the most basic questions and make the pull-down answers robust. We will take your comment under advisement, and possibly send the questionnaires out once all the pilot test participants are selected and prior to the orientation meeting, so that participants understand the visual layout of the online questionnaires.

ROADWAY EMERGENCY RESPONSE SIMULATION PROCEDURES / CONSIDERATIONS

Comment: PHMSA realizes it is putting a bit more burden on the emergency response community by asking you to conduct more of a special simulation for this activity. The emergency response simulations are intended to be limited to just the communication of the HM shipping paper information. This is a check of the current status within the transportation system as to whether it is feasible to utilize e-systems to communicate HM information now. PHMSA is not looking to mandate the use of either e-HM information or a specific technology.

Q: Have the carriers been asked to actually have available a second paper document during this pilot test period so that they can provide the responders a take-away in the paper document to actually do a comparison to what electronic data they actually receive?

A: This idea will be incorporated into the pilot test. It will allow PHMSA to review the information entered by the responder into the Emergency Response Simulation Question Set for accuracy with that listed on the hardcopy shipping paper.

Comment: One approach to scheduling the simulations with HM carriers willing to participate in the program is to pick a fixed location close to their routes and proximal to the responders, and then establish agreed upon dates and times for pilot test simulations. Obviously, we have to be mindful of local restrictions on certain HM routes and restrictions.

Comment: Carriers have multiple shipments and let the responders pick one of them and just meet with them and have that carrier/operator provide the documentation. Or pick a fixed location such as a train yard, and have somebody meet there with the capability to hopefully provide the data; for example, a trucking official could meet responders at a certain location where we think may be out of the normal reception area to see if they can produce the documents, rather than dealing with the actual vehicles and HM shipments themselves.

Comment: Potential incident scenarios include driver conscious or unconscious, and information available or not available on the vehicle. Under the driver unconscious and the vehicle information not available scenarios, a normal sequence of procedures for identifying the HM, which is based on transportation mode, vehicle type, and carrier information, is followed. For these scenarios, the responders need to determine how to access the information for that carrier electronically. Normally, responders link with public safety answering points (PSAPs); in more metro areas, they probably have that capability in the field. Can they telephone the carrier and then gain the information based on truck size, location, and then have the information sent electronically to them? It is done every day in the field, and responders generally receive faxes or e-mails with HM bills of lading information already there. For this part of this process, that would be another potential, as not only do we engage the pilot test carriers, but also that we engage based on the type of HM incident. This process will help fill that void, and linking the PSAPs into the process is critical. The process is comparable to what has been going on for probably 20 years with fixed facilities with material safety data sheet information. It is a natural progression for roadway, but is more complicated because of the dynamics of the locations. **Response:** At the orientation meeting, PHMSA will communicate the pilot test date range, and that every shipper and carrier is fair game for being involved in an emergency response simulation. PHMSA will provide the emergency responders with a rough scenario (e.g., pretend a truck is tipped over on the highway, no fire yet). PHMSA wants the emergency responders involved in the simulations to ask for different pieces of HM information, based on the rough scenarios we give you. What would you ask for first? What would you need immediately? You don't need all 24 information pieces, but you need maybe the top six. So the emergency responders are going to look for different information, based on those particular scenarios. What PHMSA is really testing is the ability of emergency response and law enforcement to receive the information electronically. In addition, sometimes a driver is available, sometimes he is incapacitated. Maybe we want to test under those two conditions, where we assume 1) the driver is available and able to assist in getting the HM information, and 2) the driver is unable to assist with getting the HM information. We have also heard that resources and abilities to respond may vary depending on the time of day, especially in terms of volunteer fire departments. PHMSA needs to determine whether to test different scenarios, on different times of days, within the

same department, etc. Those types of variations are important to try and capture in the pilot tests.

Comment: The HM-ACCESS team has put together a good protocol for conducting the pilot test. We should make note of flaws, limitations, etc., associated with the data we collect in the report. A natural outcome of this work may be a special permit, which would address some of the points made during this discussion.

RAIL EMERGENCY RESPONSE SIMULATION PROCEDURES / CONSIDERATIONS

Q: In terms of this exercise, would it be better to test sharing information by involving a mixed freight container train as opposed to a unit tank car train?

A: PHMSA needs to make sure it accounts for the different rail carrier types; currently, seven major rail lines and probably 500 or so other short lines exist in the U.S., with the Mississippi River acting as a dividing line between the east and west coasts. So picking representatives of these the types of rail lines and those operating on each side of the U.S. is critical; selecting two major carriers and one short line that may carry more than others may work for the simulations. Also, consider performing the simulations at rail yards, switch yards, a trans-load site, and an intermodal port (land and sea).

Comment: The HM-ACCESS team will check with PHMSA's Paperwork Reduction Act (PRA) POC to see how constrained we are in selecting volunteers; are we restricted to only selecting from the 83 that previously responded, or can we expand our selection to a wider group, and if so, how should we proceed to do so under PRA?

Comment: Shippers and carriers may not mind helping to defray the cost for emergency responders to attend the orientation meeting, if doing so will help PHMSA in conducting the pilot test. **Response:** The burden of cost for responders to come to participate in the orientation meeting is somewhat of an insurmountable potential roadblock. If carriers can be convinced by record of this meeting that the response community may not be able to participate and that the responders are asking for assistance, and if the carriers can establish some sponsorship or a co-partner with a response agency to go to the orientation meeting, then the emergency responders may welcome such sponsorship, which could be done directly between carriers and response agencies without involving PHMSA in such negotiations.

Comment: In rural areas, the emergency responders may not possess the same depth of HM knowledge as an emergency responder from an urban area. PHMSA ought to consider, using rail as an example, what is going on in the rail lot, the rail line, where the HM and the lines they are being shipped on are located, and maybe trying to pick different localities. This way, PHMSA will have a broader picture of how HM are transported in each transportation mode, and your report will better reflect the realities of HM communication in transportation.

Comment: DOT's Secretary Fox recently entered into an agreement with the American Association of Railroads (AAR), where approximately 1,500 first responders are going to

be field trained at the railroad-funded training facility out in Pueblo, Colorado. First responder representatives were not present when the training discussion was taking place. While responders wrote a letter applauding training as being part of that agreement, we also provided our perspective that DOT and AAR need to matrix the training more because this is specialized training, and there are different National Fire Prevention Association (NFPA) and Occupational Safety and Health (OSHA) standards, and we think they need more operational and awareness-level training. For the rural areas, you have got to bring it down to their awareness level; they are not experts, and they are not receiving specialized HM training to ensure they understand what is going to be on the HM shipping paper documentation.

MARITIME EMERGENCY RESPONSE SIMULATION PROCEDURES / CONSIDERATIONS

Comments and question and answer dialogue were not provided for the Maritime Mode.

AIR EMERGENCY RESPONSE SIMULATION PROCEDURES / CONSIDERATIONS

Comment: There does not appear to be any airport fire department HM responders on the participant list in the 30-Day Notice. We should reach out to them to include them in this effort. None of the regular HM responders go into airports. Each airport, and some airlines, has its own firefighters to respond to HM incidents occurring in an airport.

Comment: The first document that responders want to try to obtain is the Notice to Pilot in Command (NOPIC), which is really a misnomer, because the other main audience are the ARFF (Airport Rescue and Fire Fighting) responders. The shipping papers would be secondary to the Notification to Captain (NOTOC).

Q: At any of those airports would any of those dedicated emergency responders happen to be federal employees?

A: The last federally-owned airports were National and Dulles, which are now in an independent authority, so they no longer have Federal employees; the emergency responders are employees of the authority. Dover is an example where they take in civilian cargo, but it is an Air Force Base.

Q: What happens if an HM container on an airplane spills while the plane is on the tarmac?

A: If the air carrier was in physical possession of the container, it must follow the DOT process for reporting it as an incident. The location of the incident will dictate who on the air carrier and/or ARFF responds to it and cleans it up. Additionally, where in transport the spill occurred, the nature of the package and failure, and the nature of the HM involved will also dictate the response.